

Presented in meeting  
11:00 Monday June 29, 1981  
with Jim Fiorillo, Mary  
Baucek of Sci Appl. Inc.  
2 staff of Native Plants Inc.  
+ Gus Manwaring of Coal Systems, Inc.  
Answers scheduled for July 10.

WESTERN TAR SANDS, INC.  
RAVEN RIDGE PROJECT, UTAH COUNTY  
ACT/047/016

MINED LAND RECLAMATION REVIEW

M-3/MR 1/9, 10, 11. The owner of record of land affected, minerals to be mined and all other minerals is the State of Utah and should be so listed.

M-3/MR 1/12. The applicant should provide a copy of ML-22168 lease document and a copy of the Farm-out agreement to demonstrate the legal right to enter.

M-3(1), M-6, M-10. The applicant should delineate on Map M-1 the topsoil storage location and any accompanying "disturbance sedimentation ditches" as listed on page 13 of the Mining and Reclamation Plan (MRP).

M-3(1). The disturbed acreage total listed on MR Form 1, item 13 does not correspond with the total given on page 13 of the MRP. If year two is to be permitted also, the Division's estimate of total acreage disturbed, 6.28, should be used. This should be corrected.

M-3(1). Does the intermittent stream channel have a name?

M-3(1). Will there be any discharges from the plant? If so, of what chemical and physical nature?

M-3(1). What is the source of water for the plant operation? Water supply diversion routes, wells or water rights should be presented.

M-3(1), M-10(11). Drainage plans, including directional flow and receiving waters should be given. The applicant should discuss drainage control on roads and treatment of runoff. Is a diversion of natural drainage planned for the uphill drainage? Where will the berm near the intermittent stream divert the runoff? What treatment is planned for sedimentation control of the disturbed area runoff?

M-3(2)(c). Does the applicant propose any erosion control for the overburden storage pile? Also, a discussion of stability control should be given including the soil stockpile.

M-3(2)(f). An estimate for the plant construction (timetable) should be provided.

M-3(2)(c), MR 2-11. Have any tests been run on processed tar sands to verify toxic elements? These should be conducted. Will the process sands be stored on the site? Where? At what point will the overburden and sands be mixed? What erosion protection is planned for either?

MR-2(5). The applicant should provide for protection from livestock grazing while monitoring for revegetation success.

MR-2(11). How will brush be disposed?

MR-2(11). There is no physical or chemical characterization of the soil in the permit area. How deep are the horizons of productive material? What volume will actually be removed? To what depth will soils be replaced for reclamation? How large an area will the soil stockpile specifically cover? Volume? More information is needed on soil redistribution. Specifically, data on final thickness of seedbed and seeding preparation. There is also a need to characterize the chemical and physical attributes of the overburden. This will determine whether it is useable or how deep of a soil cover is necessary if it proves toxic, or if it is not recovered to the same depth as originally found. Soil/overburden test plots may prove useful in determining revegetation potential.

M-10(2). The applicant should discuss whether there is a safety hazard to the public, to stock or to wildlife. If so, fencing should be provided. Warning signs should be posted if hazards exist and indicated on a map where they will be installed.

M-10(2). Methods of trash disposal should be presented.

M-10(9). If phase II is not instituted, the applicant should discuss plans for abandonment, including structure removal.

M-10(10). Reclamation of roads should be presented including pre/post usage contour profiles.

M-5. A reclamation surety estimate will have to be worked out. Have any figures or estimates been exchanged with the Division of State Lands. If not, would the applicant care to submit any cost estimates prior to Division of Oil, Gas and Mining's calculation of the surety?

M-3. The applicant has achieved success when 35 percent cover is established. The applicant is committing to revegetate all areas disturbed. Are there any areas to be exempted (e.g., rock outcrops)?